

# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/12/2538 Dated: 29-12-2022

Date of Test: <u>04-01-2023</u>

To,

Resident Engineer NESPAK

Construction of Underpass at Samanabad Morr.

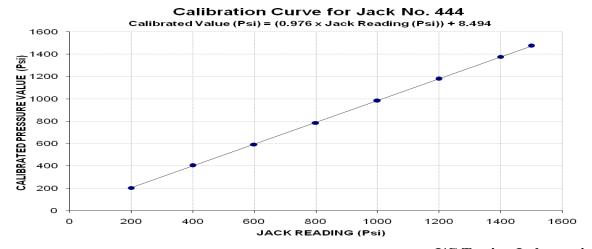
# Subject: - CALIBRATION OF HYDRAULIC JACK WITH PRESSURE GAUGE (MARK: TFL/12/2538) (Page # 1/1)

Reference to your Letter No. 4403/03/AZ/Lab/Calibration-Jack-002, Dated: 28/12/2022 on the subject cited above. One Hydraulic Jack No. NIZAMI - 444 with Pressure Gauge No. EN 837-1 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 5800 (Psi) Calibrated Range : Zero - 1500 (Psi)

Pressure Gauge Reading (Psi)	200	400	600	800	1000	1200	1400	1500
Calibrated Load (kg)	24800	49250	72250	95800	119800	143800	167800	179800
Calibrated Pressure (Psi)	203	404	593	786	983	1179	1376	1475

The Ram Area for Calibration = 268.8 in<sup>2</sup>



I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

Ref: <u>CED/TFL/12/2547</u> Dated: <u>30-12-2022</u>

Date of Test: <u>04-01-2023</u>

To,

Resident Engineer NESPAK

Construction of Road Connecting Sub-Division Wazir to Banu Circular Road Banu including Bridges along with Approaches.

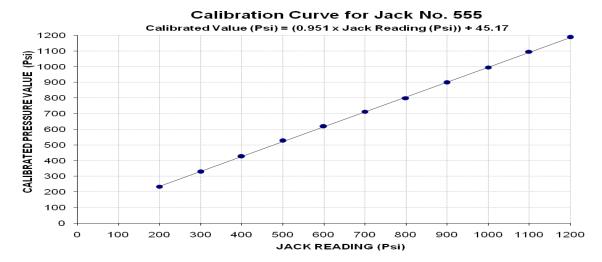
Subject: - CALIBRATION OF HYDRAULIC JACK WITH PRESSURE GAUGE (MARK: TFL/12/2547) (Page # 1/3)

Reference to your Letter No. 4274/021/SA/196, Dated: 09/12/2022 on the subject cited above. One Hydraulic Jack No. 555 with Pressure Gauge No. EN 837-1 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 6000 (Psi) Calibrated Range : Zero - 1200 (Psi)

Jack Reading (Psi)	200	300	400	500	600	700	800	900	1000	1100	1200
Calibrated Load (kg)	33400	46800	60800	75000	88000	101400	113800	128000	141800	156000	169200
Calibrated Pressure (Psi)	235	329	427	527	618	712	799	899	996	1095	1188

The Ram Area for Calibration = 397.40 in<sup>2</sup>



I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

Ref: <u>CED/TFL/12/2547</u> Dated: <u>30-12-2022</u>

Date of Test: <u>04-01-2023</u>

To,

Resident Engineer NESPAK

Construction of Road Connecting Sub-Division Wazir to Banu Circular Road Banu including Bridges along with Approaches.

Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/05/1470) (Page # 2/3)

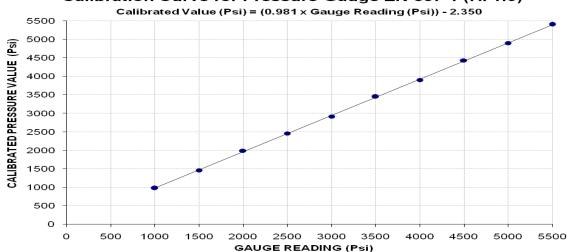
Reference to your Letter No. 4274/021/SA/196, Dated: 09/12/2022 on the subject cited above. One Pressure Gauge No. EN 837-1 (KI 1.6) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 15000 (Psi) Calibrated Range : Zero - 5500 (Psi)

Pressure Gauge Reading (Psi)	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500
Calibrated Load (kg)	13600	20300	27700	34200	40600	48000	54300	61700	68200	75200
Calibrated Pressure (Psi)	977	1458	1990	2457	2916	3448	3901	4432	4899	5402

The Ram Area for Calibration = 198 cm<sup>2</sup>

#### Calibration Curve for Pressure Gauge EN 837-1 (KI 1.6)



I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

Ref: <u>CED/TFL/12/2547</u> Dated: <u>30-12-2022</u>

Date of Test: 04-01-2023

To,

Resident Engineer

**NESPAK** 

Construction of Road Connecting Sub-Division Wazir to Banu Circular Road Banu including Bridges along with Approaches.

Subject: - CALIBRATION OF DIAL GAUGES (MARK: TFL/05/1470) (Page # 3/3)

Reference to your Letter No. 4274/021/SA/196, Dated: 09/12/2022 on the subject cited above. Four Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

Total Range : Zero - 50 (mm) Calibrated Range : Zero - 50 (mm)

	Toracca Range.	2010 -	50 (HIII)	
Standard		Dial Gaug	e Readings	
Reading	Dial Gauge No. I (14J230037)	Dial Gauge No. II (131020264)	Dial Gauge No. III (14J23003)	Dial Gauge No. IV (S17649)
400	394	392	392	373
800	797	792	792	774
1200	1198	1192	1193	1173
1600	1601	1592	1594	1473
2000	2002	1992	1998	1973
2400	2404	2393	2397	2373
2800	2807	2793	2798	2773
3200	3210	3194	3199	3170
3600	3611	3593	3600	3573
4000	4012	3993	4001	3968
4400	4413	4394	4402	4372
4800	4814	4793	4802	4770
5000	5014	4993	5004	4970

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,

Resident Engineer ESAC Sector U, DHA Multan

Award of Civil Infrasture Works Sector U (Part-2) including MC between Sector L & P and Services Road along MC Sector T & X (Package 3) on Deferred Pament DHA, Multan

Reference # CED/TFL <u>2550 (Dr. Ali Ahmed)</u>
Reference of the request letter # ESAC/CW/Sec U Pt-2/177
Dated: 02-01-2023
Dated: 10-11-2022

**Tension Test Report** (Page -1/1)

Date of Test 04-01-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight		neter/ ze		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	4.231	10	1.258	1.27	1.244	39400	54800	68400	69830	95200	97200	1.60	20.0	
2	4.238	10	1.259	1.27	1.246	39400	54800	68400	69720	95200	97000	1.70	21.3	Steel
3	5.273	11	1.405	1.56	1.550	50400	71800	71300	71670	101500	102100	1.30	16.3	FF S
4	5.268	11	1.404	1.56	1.548	50400	71800	71300	71740	101500	102200	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
			No	te: only	four s	amples f	or tensile	and two	samples	for bend	test			
							Bend T	est						
#10	) Bar Be	nd Test	Throug	gh 180°	is Satist	factory								
#1	l Bar Be	nd Test	Throug	sh 180°	is Satis	factory								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

# WEERING WITH A STATE OF THE STA

### STRUCTURAL ENGINEERING DIVISION

# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,

M/S Pakistan Wire Industries (Pvt) Limited Karachi

Reference # CED/TFL <u>2557 (Dr. Ali Ahmed)</u>
Reference of the request letter # WRD/001/LAB001

**Tension Test Report** (Page – 1/1)

Date of Test 04-01-2023

Description Steel Wire Rope Fiber Core Tensile Test

Sr. No.	Nominal Diameter	Measured weight	Breaking Load	Remarks / Coil No.
	(mm)	(kg/m)	(kg)	Rema
1	12	0.36	7000	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
		Only one sample for Test	t .	

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 02-01-2023

Dated: 02-01-2023

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,

Manager Civil
Nishat Mills Limited
Dyeing & Finishing Plant, Lahore

Reference # CED/TFL <u>2558 (Dr. M Rizwan Riaz)</u>
Reference of the request letter # NDF/SST/003

Dated: 02-01-2023

Dated: 29-12-2022

**Tension Test Report** (Page -1/1)

Date of Test 04-01-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Si	neter/ ize um)		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.415	10	10.01	0.12	0.122	3900	5400	71650	70490	99207	97600	1.50	18.8	el
2	0.414	10	10.00	0.12	0.122	3800	5400	69812	68750	99207	97700	1.50	18.8	Sheikhoo Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	ikho
-	-	-	-	-	-	-	_	-	-	-	-	-	-	She
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	'		N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test	1		
10	D: 3	D D	1.75	T1	1 1000:	G .: C	Bend T	est						
10r	nm Dıa	Bar Bei	nd Test	Throug	h 180° i	s Satisfac	etory							

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,

Team Leader G3 Engineering Consultant (Pvt) Ltd

"Construction of Building GC Women University Sialkot on Acquired of Land."

Reference # CED/TFL <u>2559 (Dr. M Rizwan Riaz)</u> Reference of the request letter # G3/0271/ Dated: 02-01-2023 Dated: 06-12-2022

**Tension Test Report** (Page -1/1)

Date of Test 04-01-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight		neter/ ze		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.389	3	0.381	0.11	0.114	4200	5400	84200	80990	108200	104200	1.20	15.0	1
2	0.387	3	0.381	0.11	0.114	4100	5300	82200	79410	106200	102700	1.10	13.8	Steel
-	-	-	-	-	-	-	-	-	-	_	-	-	-	FF
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend 1	test	ı		1
2 /0	"D. D	D 1	7F 4 7F1	1	1000: 4	7	Bend T	est						
3/8	" Dia Ba	ir Bend	Test Th	rough	180° 18 \$	Satisfacto	ory							

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,

Assistant Director
Defence Housing Authority
Gujranwala
"Construction of Villas (Block A & D)"

Reference # CED/TFL **2560** (Dr. M Rizwan Riaz)

Reference of the request letter # 111/3/AD Bldgs/Gen/31

Dated: 02-01-2023

Dated: 27-12-2022

**Tension Test Report** (Page -1/1)

Date of Test 04-01-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight		neter/ ze		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)	Ultimate Stress (psi)		Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.378	3	0.376	0.11	0.111	3500	5400	70200	69380	108200	107100	1.30	16.3	Siraj Steel
2	0.378	3	0.376	0.11	0.111	3500	5400	70200	69360	108200	107100	1.30	16.3	Sir
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: onl	ly two s	amples f	or tensile	and one	sample f	for bend 1	test			
							Bend T	est						
#3	Bar Ben	d Test	Γhrough	180° is	s Satisfa	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,

Material Engineer Banu Mukhtar Contracting (Pvt) Ltd. Burj-1 by AJWA Builders

Reference # CED/TFL **2563** (Dr. Ali Ahmed)

Reference of the request letter # DOC-BMC/AJWA/039

Dated: 03-01-2023

Dated: 02-01-2023

**Tension Test Report** (Page -1/1)

Date of Test 04-01-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight		neter/ ze		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)	Ultimate Stress (psi)		Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	4.357	10	1.277	1.27	1.281	43000	58200	74700	74010	101100	100200	1.50	18.8	
2	4.413	10	1.285	1.27	1.297	43800	58000	76100	74420	100700	98600	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							Bend T	est .						
#10	) Bar Be	nd Test	Throug	gh 180°	is Satist	factory	Delid 1	CSI						

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,

Project Director New Metro City Housing Scheme Sara-I-Alamgir

Reference # CED/TFL **2564** (Dr. Ali Ahmed)

Reference of the request letter # BSM/NMC/QA/108

Dated: 03-01-2023

Dated: 31-12-2022

**Tension Test Report** (Page -1/1)

Date of Test 04-01-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Si	neter/ ize ch)		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.380	3/8	0.377	0.11	0.112	3600	4900	72200	71030	98200	96700	1.40	17.5	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	FF
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	r tensile	and one	sample f	or bend t	est			
3/8	" Dia Ba	ır Bend	Test Tl	nrough	180° is \$	Satisfacto	Bend T ory	`est						

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,

Resident Engineer ZEERUK – LOYA – MIHA JV

Development of Islamabad Expressway from Korang to PWD Interchange (km 1+300 to 3+200) including Railway Bridges. (MWI)

Reference # CED/TFL <u>2565 (Dr. Ali Ahmed)</u>
Reference of the request letter # ZI/RE/FWO-RB/22/92

**Tension Test Report** (Page -1/2)

Date of Test 04-01-2023 Gauge length 640 mm

Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield st clause	_		king ngth e (6.2)	Young's Modulus of Elasticity "E"	Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa	%	Rema
1	12.70 (1/2")	775.0	779.0	18300	179.52	19700	193.26	199	>3.50	XX
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	1	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	
_	-	-	-	-	-	-	-	-	-	

Only one sample for Test

#### Note:

- 1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM A416a
- 2. Load versus percentage strain graphs are attached

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 03-01-2023

Dated: 14-11-2022

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



## **Test Floor Laboratory Department of Civil Engineering** University of Engineering and Technology Lahore, 54890 Pakistan, Ph: 92-42-99029202

To,

Resident Engineer ZEERUK - LOYA - MIHA JV

Development of Islamabad Expressway from Korang to PWD Interchange (km 1+300 to 3+200) including Railway Bridges.

Reference # CED/TFL 2565 (Dr. Ali Ahmed)

Reference of the request letter # ZI/RE/FWO-RB/22/92

**Graph** (Page – 2/2)

# Stress Strain Relation -- Specimen No. W 1 2000 1800 1600 1400 Stress (Mpa) 1200 1000 800 600 400 200 0 0.2 0 0.4 0.6 8.0 Strain (%)

I/C Testing Laboratoires **UET Lahore, Pakistan.** 

Dated: 03-01-2023

Dated: 14-11-2022

- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,

Chief Technical Officer Sheikhoo Sugar Mills (Steel Division) Anwar Abad Kot Addu, Muzaffargarh

Reference # CED/TFL <u>2567 (Dr. M Yousaf)</u> Reference of the request letter #Nil

**Tension Test Report** (Page -1/2)

Date of Test 04-01-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	R
1	0.370	3	0.372	0.11	0.109	3590	4940	72000	72830	99000	100300	1.60	20.0	809N
2	0.365	3	0.369	0.11	0.107	3520	4760	70600	72410	95400	98000	1.50	18.8	844N
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only Two samples for tensile test														
	-						Bend '	Test						

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 04-01-2023

Dated: 02-01-2023

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,

Chief Technical Officer Sheikhoo Sugar Mills (Steel Division) Anwar Abad Kot Addu, Muzaffargarh

Reference # CED/TFL **2567** (Dr. M Yousaf)

Reference of the request letter #Nil

Dated: 04-01-2023

Dated: 02-01-2023

**Tension Test Report** (Page -2/2)

Date of Test 04-01-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (mm)		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.414	10	10.00	0.12	0.122	4080	5420	74956	73840	99574	98100	1.20	15.0	469N
2	0.416	10	10.03	0.12	0.122	4030	5420	74038	72600	99574	97700	1.50	18.8	497N
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	_	_	_	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only Two samples for tensile test														
Bend Test														

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples